



Analytical Laboratory

Analytical Lab
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13339 Hagers Ferry Road
Huntersville, NC 28078-7929
McGuire Nuclear Complex - MG03A2
Phone: 980-875-5245 Fax: 980-875-4349

Order Summary Report

Order Number: J12090038

Project Name: NPDES - MONTHLY

Customer Name(s): Matthew Dorn, Mark Harper, Todd Spade, Tara Thomas, Matthew Hoyt

Customer Address: 11021 BROWER RD.

NORTH BEND, OH 45052

Lab Contact: Theron T James Phone: 980-875-4795

Report Authorized By: _____ **Date:** 9/19/2012
(Signature)

Program Comments:

Miami Fort NPDES - Monthly

Data Flags & Calculations:

Any analytical tests or individual analytes within a test flagged with a Qualifier indicate a deviation from the method quality system or quality control requirement. The qualifier description is found at the end of the Certificate of Analysis (sample results) under the qualifiers heading. All results are reported on a dry weight basis unless otherwise noted. Subcontracted data included on the Duke Certificate of Analysis is to be used as information only. Certified vendor results can be found in the subcontracted lab final report. Duke Energy Analytical Laboratory subcontracts analyses to other vendor laboratories that have been qualified by Duke Energy to perform these analyses except where noted.

Data Package:

This data package includes analytical results that are applicable only to the samples described in this narrative. An estimation of the uncertainty of measurement for the results in the report is available upon request. This report shall not be reproduced, except in full, without the written consent of the Analytical Laboratory. Please contact the Analytical laboratory with any questions. The order of individual sections within this report is as follows:

Job Summary Report, Sample Identification, Technical Validation of Data Package, Analytical Laboratory Certificate of Analysis, Analytical Laboratory QC Reports, Sub-contracted Laboratory Results, Customer Specific Data Sheets, Reports & Documentation, Customer Database Entries, Test Case Narratives, Chain of Custody (COC)

Certification:

The Analytical Laboratory holds the following State Certifications : North Carolina (DENR) Certificate #248, South Carolina (DHEC) Laboratory ID # 99005. Contact the Analytical Laboratory for definitive information about the certification status of specific methods.

The results in this report meet NELAP requirements through New York State Department of Health Certification # 11717.. Certified parameters are designated with an "N" in the analytical report.

Sample ID's & Descriptions:

Sample ID	Plant/Station	Collection Date and Time	Collected By	Sample Description
2012019079	MIAMI-FORT	04-Sep-12 9:30 AM	Mark Harper	OUTFALL 002
2012019080	MIAMI-FORT	04-Sep-12 8:45 AM	Mark Harper	OUTFALL 608
2 Total Samples				

Technical Validation Review

Checklist:

- | | | |
|--|---|--|
| COC and .pdf report are in agreement with sample totals and analyses (compliance programs and procedures). | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| All Results are less than the laboratory reporting limits. | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| All laboratory QA/QC requirements are acceptable. | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |

Report Sections Included:

- | | |
|---|--|
| <input checked="" type="checkbox"/> Job Summary Report | <input type="checkbox"/> Sub-contracted Laboratory Results |
| <input checked="" type="checkbox"/> Sample Identification | <input type="checkbox"/> Customer Specific Data Sheets, Reports, & Documentation |
| <input checked="" type="checkbox"/> Technical Validation of Data Package | <input type="checkbox"/> Customer Database Entries |
| <input checked="" type="checkbox"/> Analytical Laboratory Certificate of Analysis | <input checked="" type="checkbox"/> Chain of Custody |
| <input type="checkbox"/> Analytical Laboratory QC Report | <input type="checkbox"/> Electronic Data Deliverable (EDD) Sent Separately |

Reviewed By: Mary Ann Ogle

Date: 9/19/2012

Certificate of Laboratory Analysis

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This report shall not be reproduced, except in full.

Order # J12090038

Site: OUTFALL 002

Collection Date: 04-Sep-12 9:30 AM

Sample #: 2012019079

Matrix: NPDES

Analyte	Result	Units	Qualifiers	RDL	DF	Method	Analysis Date/Time	Analyst
<u>TOTAL DISSOLVED SOLIDS</u>								
TDS	1100	mg/L	N	10	1	SM2540C	9/6/2012 2:40:00 PM	TJA7067

Site: OUTFALL 608

Collection Date: 04-Sep-12 8:45 AM

Sample #: 2012019080

Matrix: NPDES

Analyte	Result	Units	Qualifiers	RDL	DF	Method	Analysis Date/Time	Analyst
<u>ALKALINITY (FIXED END POINT 4.5)</u>								
Alkalinity (mg/L CaCO ₃)	1200	mg/L (CaCO ₃)	N	0.1	1	SM2320B	9/13/2012 7:48:00 A	TJA7067
<u>INORGANIC IONS BY IC</u>								
Chloride	6600	mg/L	N	100	1000	EPA 300.0	9/10/2012 9:07:00 A	JAHERMA
Fluoride	8.6	mg/L	N	5	50	EPA 300.0	9/10/2012 9:07:00 A	JAHERMA
Sulfate	6400	mg/L	N	100	1000	EPA 300.0	9/10/2012 9:07:00 A	JAHERMA
<u>TOTAL METALS BY ICP</u>								
Boron (B)	313	mg/L	N	0.5	10	EPA 200.7	9/14/2012 12:02:00 F	DJSULL1
Iron (Fe)	< 0.01	mg/L	N	0.01	1	EPA 200.7	9/14/2012 12:02:00 F	DJSULL1
Manganese (Mn)	0.248	mg/L	N	0.005	1	EPA 200.7	9/14/2012 12:02:00 F	DJSULL1
<u>TOTAL RECOVERABLE METALS BY ICP-MS</u>								
Arsenic (As)	< 20	ug/L	N	20	1	EPA 200.8	9/7/2012 2:16:00 PM	KRICHA
Barium (Ba)	176	ug/L	N	20	1	EPA 200.8	9/7/2012 2:16:00 PM	KRICHA
Cadmium (Cd)	< 20	ug/L	N	20	1	EPA 200.8	9/7/2012 2:16:00 PM	KRICHA
Chromium (Cr)	< 20	ug/L	N	20	1	EPA 200.8	9/7/2012 2:16:00 PM	KRICHA
Copper (Cu)	< 20	ug/L	N	20	1	EPA 200.8	9/7/2012 2:16:00 PM	KRICHA
Lead (Pb)	< 20	ug/L	N	20	1	EPA 200.8	9/7/2012 2:16:00 PM	KRICHA
Zinc (Zn)	< 20	ug/L	N	20	1	EPA 200.8	9/7/2012 2:16:00 PM	KRICHA
<u>TOTAL DISSOLVED SOLIDS</u>								
TDS	27000	mg/L	N	10	1	SM2540C	9/6/2012 2:40:00 PM	TJA7067
<u>TOTAL SUSPENDED SOLIDS</u>								
TSS	27	mg/L	N	5	1	SM2540D	9/7/2012 11:05:00 A	TJA7067

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST FORM



Duke Energy Analytical Laboratory

Mail Code MGO3A2 (Building 7405)
13339 Hagers Ferry Rd
Huntersville, N. C. 28078

(704) 875-5245

(704) 875-4349

Fax:

LIMS # J12090038		Sample Class NPDES	Samples Originating From	OHIO
Logged By R28	Date & Time 9/5/12 1050		SAMPLE PROGRAM NPDES	
Vendor		Cooler Temp (C) 1.0		

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DISTRIBUTION
ORIGINAL to LAB,
COPY to CLIENT

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1) Project Name MIAMI-FORT NPDES Monthly (Week 1 - September 4, 2012)		2) Phone No:
3) Client Miami-Fort - Tara Thomas, Matt Hoyt		4) Fax No:
5) Business Unit:	6) Process:	7) Resp. Center To:
8) Project ID:	9) Activity ID:	10) Mail Code:

PO #			¹⁵ Preserv.: 1=HCL 2=H ₂ SO ₄ 3=HNO ₃ 4=Ice 5=None		4	4	3	4	4											
IMR #			Customer to complete all appropriate non-shaded areas.		¹⁵ Analyses Required		TDS		Cl, F, SO ₄		B, Fe, Mn, As, Ba, Cd, Cr, Cu, Pb, Zn		TSS		Alkalinity					

LAB USE ONLY	
¹¹ Lab ID	
2012019079	
2012019080	

¹² Chem Desktop No.	¹³ Sample Description or ID	Date	Time	Signature
	Outfall 002	9-4-12	0930	<i>[Signature]</i>
	Outfall 608	9-4-12	0950	<i>[Signature]</i>

¹⁴ Collection Information					¹⁷ Comp.	¹⁸ Grab	TDS	Cl, F, SO ₄	B, Fe, Mn, As, Ba, Cd, Cr, Cu, Pb, Zn	TSS	Alkalinity
					X		1				
					X		1	1	1	1	1

Customer to sign & date below - fill out from left to right.

1) Relinquished By <i>[Signature]</i>	Date/Time 9-4-12 1000	2) Accepted By <i>[Signature]</i>	Date/Time 9/4/12
3) Relinquished By <i>[Signature]</i>	Date/Time 9/5/12 1030	4) Accepted By <i>[Signature]</i>	Date/Time 9/5/12 1030
5) Relinquished By	Date/Time	6) Accepted By	Date/Time
7) Relinquished By <i>[Signature]</i>	Date/Time 9-4-12 1000	8) Accepted By <i>[Signature]</i>	Date/Time 9/5/12 1045
9) Seal/Locked By	Date/Time	10) Seal/Lock Opened By	Date/Time
11) Seal/Locked By	Date/Time	12) Seal/Lock Opened By	Date/Time

Customer, IMPORTANT!
Please indicate desired turnaround.

²² Requested Turnaround
10 Days <u>X</u>
*7 Days _____
*48 Hr _____
*Other _____
*Add. Cost Will Apply

Comments: **ICP TOT - B, Fe, Mn IMS-TRM - As, Ba, Cd, Cr, Cu, Pb, Zn Fe HACH = 0.05**